

What is claimed is:

1. Automated chromatography system for the purification of a proteins,  
comprising a plurality of chromatography columns, a plurality of computer-controlled  
5 valves, a pump, at least one loop for the storage of fluid, a detector able to produce an  
output signal representing the composition of a fluid passing through the detector, a  
computer provided with and adapted to run software for controlling said valves, pump  
and detector, wherein said software is able to process the output signal of said  
detector to identify two signal parameters.
- 10 2. Automated chromatography system in accordance with claim 1 characterised  
in that said two signal parameters are the signal level and the rate of change of the  
signal level.
3. Automated chromatography system in accordance with claim 1 or claim 2  
characterised in that said software is adapted to perform predetermined actions when  
15 predetermined conditions for said two signal parameters are fulfilled at the same time.
4. Automated chromatography system in accordance with claim 1 or claim 2  
characterised in that said software is adapted to perform predetermined actions when  
predetermined conditions for one of said two signal parameters is fulfilled.
5. Automated chromatography system in accordance with claim 3 or claim 4  
20 characterised in that said predetermined conditions for said two signal parameters are  
default conditions or operator selected conditions.
6. Software for controlling an automated chromatography system characterised  
in that it is adapted is able to receive an output signal from a detector and to process  
the output signal of said detector to identify two signal parameters.

7. Software in accordance with claim 6 characterised in that said software is adapted to identify said signal level and the rate of change of said signal level.
8. Software in accordance with claim 6 or claim 7 characterised in that said software is adapted to perform predetermined actions when predetermined conditions  
5 for said two signal parameters are fulfilled at the same time.
9. Software in accordance with claim 6 or claim 7 characterised in that said software is adapted to perform predetermined actions when predetermined conditions for one of said two signal parameters is fulfilled.
10. Software in accordance with claim 8 or claim 9 characterised in that said  
10 software is adapted to allow an operator to select default predetermined conditions for said two signal parameters or to input operator-selected predetermined conditions.